



#22

1600

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/830,111D

DATE: 07/15/2003
 TIME: 14:08:26

Input Set : N:\CrF4\07092003\I830111D.raw
 Output Set: N:\CRF4\07152003\I830111D.raw

1 <110> APPLICANT: Kaneka Corporation
 2 Matsuda, Hideyuki
 3 Kawamukai, Makota
 4 Yajima, Kazuyoshi
 5 Ikenaka, Yasuhiro
 6 Hasegawa, Junzo
 7 Takahashi, Satomi
 8 <120> TITLE OF INVENTION: Process For Producing Coenzyme Q10
 9 <130> FILE REFERENCE: 21581-00265-US

C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/830,111D

11 <141> CURRENT FILING DATE: 2001-07-23

12 <160> NUMBER OF SEQ ID NOS: 2

13 <170> SOFTWARE: PatentIn version 3.2

15 <210> SEQ ID NO: 1

16 <211> LENGTH: 1653

17 <212> TYPE: DNA

18 <213> ORGANISM: Saioella complicata

19 <400> SEQUENCE: 1

20	tttgtgggg tcgaaaagtc ggcacgggtg caggttcggc ttgagaccag taaaggctcg	60
21	gagattgagt tcaggacaaa gcttgatcc gtgaggtcta catttcagc aaatcatttc	120
22	aaatccatat accatggcct caccagact gggatcga agcatcagct ctcgatcaat	180
23	cgcctcttg cgatcggtt ccctaagaac agcctcgca cttcattac gactaagatg	240
24	taccccgacg agccggccat cgagttcatg ggctgtctgt gtgtcttcgg cgtcgagact	300
25	ggttgagcct gatccgaatc aacctctcat caatccgctc aacttggtcg gtcccgagat	360
26	gtcaaatttt acatccaaca tccgatctct cctcggttca ggacaccctt ctctcgacac	420
27	tgtcgctaaa tactatgttc agtctgaggg aaagcatatt cgtccgctca tggtaactgct	480
28	gatggctcag ggcacggagg ttgcgcctaa agttcagggt tggagaagg tcgtggaggt	540
29	tccgtgaac gaggactcg caccaccaga ggtgctcaat gacaagaacc cagatatgat	600
30	gaacatgagg tcaggaccat taacgaagga cggcgagatc gaggacaga cgtcaat	660
31	cctcgctcg caacggcggt tggctgagat cacggagatg atccatgcag catcactcct	720
32	ccacgacgac gttatcgacg cttccgagac cagacaaac gcaccatcc gaaaccaggc	780
33	attcgaaac aagatggcga ttttggctgg tgatttctt tggacggg cgtctgtgc	840
34	attggcgagg ttgcgcatac cgaggtgtat tgagctttt gctactgtta ttgcaaactt	900
35	ggttgaggga gagttcatgc agttaaaaaa tactgttcat gatgcgtattt aggctacggc	960
36	gacgcaggaa acgttcgatt actatttgcga gaagacttac ttgaagactg cgtccttgc	1020
37	tgccaagtcg tgcagagcaa gtgcgttgc ggtgggtct acgcctgagg ttgtgtatgc	1080
38	tgcttatgt tacggaagga accttggttt ggcattccag atcgtcgacg acatgctcga	1140
39	ctacaccgtc tccgctaccg acctcggtaa gcccggcgt gcagacctcc agctcggtct	1200
40	cggcaccgcg cccgcctct tcgcatggaa gcaccacgcc gagtcggc ccatgatcaa	1260
41	gcgcaagtgc tctgacccag gagacgtcga gcgtgcacgc gagttggtcg agaaaagtga	1320
42	tggattggag aagacgagag cttggcggaa ggagtatgcc cagaaggcgt tggatgcaat	1380
43	tcgacgttc cccggagatc cggcacggaa ggcttggag cagttgacgg acaagggttt	1440
44	gactaggtca agatagaat tcgagctcg taccggggat tcctctagag tcgacactgca	1500

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/830,111D

DATE: 07/15/2003

TIME: 14:08:26

Input Set : N:\Crf4\07092003\I830111D.raw

Output Set: N:\CRF4\07152003\I830111D.raw

45 ggcatgcaag cttggctgtt ttggcgatg agagaagatt ttcagcctga tacagattaa 1560
 46 atcagaacgc agaagcggtc tgataaaaaca gaatttgcct ggcggcagta ggcgggtgg 1620
 47 cccacctgac cccatgccga actcagaagt gaa 1653
 49 <210> SEQ ID NO: 2
 50 <211> LENGTH: 440
 51 <212> TYPE: PRT
 52 <213> ORGANISM: Saitoella complicata
 53 <400> SEQUENCE: 2
 54 Met Ala Ser Pro Ala Leu Arg Ile Arg Ser Ile Ser Ser Arg Ser Ile 1560
 55 1 5 10 15
 56 Ala Ser Leu Arg Ser Val Thr Leu Arg Thr Ala Ser Ala Pro Ser Leu 1620
 57 20 25 30
 58 Arg Leu Arg Cys Thr Pro Thr Ser Arg Pro Ser Ser Ser Trp Ala Ala 1653
 59 35 40 45
 60 Ala Val Ser Ser Ala Ser Arg Leu Val Glu Pro Asp Pro Asn Gln Pro 1560
 61 50 55 60
 62 Leu Ile Asn Pro Leu Asn Leu Val Gly Pro Glu Met Ser Asn Leu Thr 1620
 63 65 70 75 80
 64 Ser Asn Ile Arg Ser Leu Leu Gly Ser Gly His Pro Ser Leu Asp Thr 1653
 65 85 90 95
 66 Val Ala Lys Tyr Tyr Val Gln Ser Glu Gly Lys His Ile Arg Pro Leu 1560
 67 100 105 110
 68 Met Val Leu Leu Met Ala Gln Ala Thr Glu Val Ala Pro Lys Val Gln 1620
 69 115 120 125
 70 Gly Trp Glu Lys Val Val Glu Val Pro Val Asn Glu Gly Leu Ala Pro 1653
 71 130 135 140
 72 Pro Glu Val Leu Asn Asp Lys Asn Pro Asp Met Met Asn Met Arg Ser 1560
 73 145 150 155 160
 74 Gly Pro Leu Thr Lys Asp Gly Glu Ile Glu Gly Gln Thr Ser Asn Ile 1620
 75 165 170 175
 76 Leu Ala Ser Gln Arg Arg Leu Ala Glu Ile Thr Glu Met Ile His Ala 1653
 77 180 185 190
 78 Ala Ser Leu His Asp Asp Val Ile Asp Ala Ser Glu Thr Arg Arg 1560
 79 195 200 205
 80 Asn Ala Pro Ser Gly Asn Gln Ala Phe Gly Asn Lys Met Ala Ile Leu 1620
 81 210 215 220
 82 Ala Gly Asp Phe Leu Leu Gly Arg Ala Ser Val Ala Leu Ala Arg Leu 1653
 83 225 230 235 240
 84 Arg Asn Pro Glu Val Ile Glu Leu Leu Ala Thr Val Ile Ala Asn Leu 1560
 85 245 250 255
 86 Val Glu Gly Glu Phe Met Gln Leu Lys Asn Thr Val Asp Asp Ala Ile 1620
 87 260 265 270
 88 Glu Ala Thr Ala Thr Gln Glu Thr Phe Asp Tyr Tyr Leu Gln Lys Thr 1653
 89 275 280 285
 90 Tyr Leu Lys Thr Ala Ser Leu Ile Ala Lys Ser Cys Arg Ala Ser Ala 1560
 91 290 295 300
 92 Leu Leu Gly Gly Ala Thr Pro Glu Val Ala Asp Ala Ala Tyr Ala Tyr 1620
 93 305 310 315 320
 94 Gly Arg Asn Leu Gly Leu Ala Phe Gln Ile Val Asp Asp Met Leu Asp

RAW SEQUENCE LISTING

DATE: 07/15/2003

PATENT APPLICATION: US/09/830,111D

TIME: 14:08:26

Input Set : N:\Crf4\07092003\I830111D.raw

Output Set: N:\CRF4\07152003\I830111D.raw

95	325	330	335
96	Tyr Thr Val Ser Ala Thr Asp Leu Gly Lys Pro Ala Gly Ala Asp Leu		
97	340	345	350
98	Gln Leu Gly Leu Ala Thr Ala Pro Ala Leu Phe Ala Trp Lys His His		
99	355	360	365
100	Ala Glu Leu Gly Pro Met Ile Lys Arg Lys Phe Ser Asp Pro Gly Asp		
101	370	375	380
102	Val Glu Arg Ala Arg Glu Leu Val Glu Lys Ser Asp Gly Leu Glu Lys		
103	385	390	395
104	400	405	410
105	Thr Arg Ala Leu Ala Glu Glu Tyr Ala Gln Lys Ala Leu Asp Ala Ile		
106	415	420	425
107	Arg Thr Phe Pro Glu Ser Pro Ala Arg Lys Ala Leu Glu Gln Leu Thr		
108	430	435	440
109	Asp Lys Val Leu Thr Arg Ser Arg		

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/830,111D

DATE: 07/15/2003

TIME: 14:08:27

Input Set : N:\Crf4\07092003\I830111D.raw

Output Set: N:\CRF4\07152003\I830111D.raw

L:10 M:270 C: Current Application Number differs, Wrong Format